

Appl. No. 09/825,045
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Amendments to the Claims:

This listing of claims will replace all prior versions,
and listings, of claims in the application:

Listing of Claims:

1. (currently amended): A selective noise canceling headset,
5 comprising:
- at least one earpiece for reproducing a selected audio
signal;
- a microphone for monitoring an external audio signal in
a vicinity of said headset; and
- 10 a selective noise suppression circuit for analyzing
said external audio signal, including:
- an audio classifier coupled to said
microphone for receiving said external audio signal,
said audio classifier being operative through use of
15 audio content analysis algorithms, to analyze the
audio content of said external audio signal to
determine if at a given time a segment is a desired
external signal, and if so to output a "use signal,"
but if not to output a "suppress signal," said desired
20 external signal segment(s) including any one or
combination of an audio alarm signal, a dog barking,
and speech directed to a user of said earpiece; and
- a noise canceling circuit for receiving both
a selected audio signal and said external audio
25 signal, and being responsive to the presence of said

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5 use signal to pass at least a portion of said external
audio signal along with said selected audio signal for
reproduction, and responsive to the presence of said
suppress signal to prevent passage of at least a
6 portion of said external signal, said noise canceling
circuit also being selectively operable for canceling
said selected audio signal during the presence of said
use signal.

10 2. (canceled).

3. (original): The selective noise canceling headset of claim 1,
wherein said reproduced portion of said external audio signal is
acoustically distinct from a general background noise of a local
15 environment.

4. (canceled).

5. (canceled).

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6. (canceled).

7. (previously presented): The selective noise canceling headset
of claim 1, wherein said selective noise suppression circuit
25 amplifies portions of said external audio signal to be added to
said selected audio signal.

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8. (currently amended): A selective noise canceling device,
comprising:

a microphone for monitoring an external audio signal;
and

5 a selective noise suppression circuit for analyzing
said external audio signal, including:

an audio classifier coupled to said
microphone for receiving said external audio
signal, said audio classifier being operative
10 through use of content-based audio segmentation
analysis techniques, to analyze said external
audio signal to determine if at a given time a
segment is a desired external signal, and if so
to output a "use signal," but if not to output a
15 "suppress signal"; and

a noise canceling circuit for receiving
said external audio signal, and being responsive
to the presence of said use signal to pass at
least a portion of said external audio signal,
20 and responsive to the presence of said suppress
signal to prevent passage of at least a portion
of said external signal for reproduction.

9. (original): The selective noise canceling device of claim 8,
25 wherein said reproduced portion of said external audio signal is
an alarm audio signal.

10. (original): The selective noise canceling device of claim 8,
wherein said reproduced portion of said external audio signal is

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acoustically distinct from a general background noise of a local environment.

11. (original): The selective noise canceling device of claim 8,
5 wherein said reproduced portion of said external audio signal is associated with speech directed to a user of said device.

12. (original): The selective noise canceling device of claim 8,
wherein said selective noise suppression circuit suppresses said
10 external audio signal unless a portion of said external audio signal is likely to be of interest to a user.

13. (original): The selective noise canceling device of claim 8,
wherein said selective noise suppression circuit segments said
15 external audio signal and reproduces only a desired portion of said external audio signal that is likely to be of interest to a user.

14. (previously presented): The selective noise canceling device
20 of claim 8, wherein said selective noise suppression circuit amplifies portions of said external audio signal to be reproduced.

15. (previously presented): A selective noise canceling method,
25 comprising:

monitoring an external audio signal;

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analyzing said external audio signal through use of content-based audio segmentation, to identify portions thereof that may be of interest to a user;

amplifying the identified portions of said external
5 audio signal that are of interest;

suppressing the portions of said external audio signal not identified; and

adding said amplified portions of said external audio signal to a selected audio signal for reproduction thereof.

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16. (original): The selective noise canceling method of claim 15, wherein said reproduced portion of said external audio signal is an alarm audio signal.

15 17. (original): The selective noise canceling method of claim 15, wherein said reproduced portion of said external audio signal is acoustically distinct from a general background selective noise of a local environment.

20 18. (original): The selective noise canceling method of claim 15, wherein said reproduced portion of said external audio signal is associated with speech directed to a user of said method.

19. (canceled).

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20. (original): The selective noise canceling method of claim 15, further comprising the step of segmenting said external audio signal and reproducing only a desired portion of said external audio signal that is likely to be of interest to a user.

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21. (canceled).